GE
Security

SymNav

User Manual

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Introduction

This is the GE *SymNav User Manual*. This document includes an overview of the product and detailed instructions explaining:

- how to view live and record video over a network and
- how to remotely configure various features of the SymDec, SymDec-4, and SymDec 16 plus 4.

There is also information describing how to contact technical support if you have questions or concerns.

To use this document effectively, you should have the following minimum qualifications:

- a basic knowledge of CCTV systems and components; and
- a basic knowledge of electrical wiring and low-voltage electrical connections.

Read these instructions and all ancillary documentation entirely before installing or operating this product. The most current versions of this and related documentation may be found on our website. Refer to *Online publication library* on page 40 for instructions on accessing our online publication library.

Note: A qualified service person, complying with all applicable codes, should perform all required hardware installation.

Conventions used in this document

The following conventions are used in this document:

Bold	Menu items and buttons.
Italic	Emphasis of an instruction or point; special terms.
	File names, path names, windows, panes, tabs, fields, variables, and other GUI elements.
	Titles of books and various documents.
`Monospace`	Text that displays on the computer screen.
	Programming or coding sequences.
Blue italic	Hyperlinks to cross-references, related topics, and URL addresses.

Safety terms and symbols

These terms may appear in this manual:

CAUTION	*Cautions* identify conditions or practices that may result in damage to the equipment or other property.
	Warnings identify conditions or practices that could result in equipment damage or serious personal injury.

Product Overview

SymNav provides you the ability to view video over Ethernet directly from:

- Video Streaming Recorders (SymDec, SymDec-4, and SymDec 16 plus 4).
- IP Cameras.
- Symnet Encoders and Decoders.

SymNav also allows you to view or play video (.mpc) that has been archived onto a CD-R, DVD, or recorded directly onto the hard drive of a PC.

Features

- Main window for viewing live or recorded video.
- Receives multicast video streams.
- Disk analysis window provides overview of recorded data on a per disk basis.
- Remote access to SymDec menu systems.
- Images can be captured, printed, and saved as a bitmap or JPEG file.
- Basic, advanced, and motion searches are launched from a single interactive search window.
- Remote Pan/Tilt/Zoom camera control.

Minimum System Requirements

The following minimum system requirements must be met before software installation.

Windows® 2000/XP and Direct X are registered trademarks of Microsoft Corporation.

Table 1. Minimum system requirements

Hardware	Specification
CPU	Pentium 2.8 GHz or faster
RAM	512 MB
Hard disk drive	50 MB free hard drive space
Audio	Audio card installed and configured
Monitor	SVGA, 1024 X 768, 24 bit color
Video	AGP or PCI Express, 128 MB DDR Memory Direct X Version 9 or higher
Operating system	Windows® 2000 SP4, XP SP2

Getting Started

Installation

Installing From CD-ROM

To install SymNav on your hard disk from a CD:

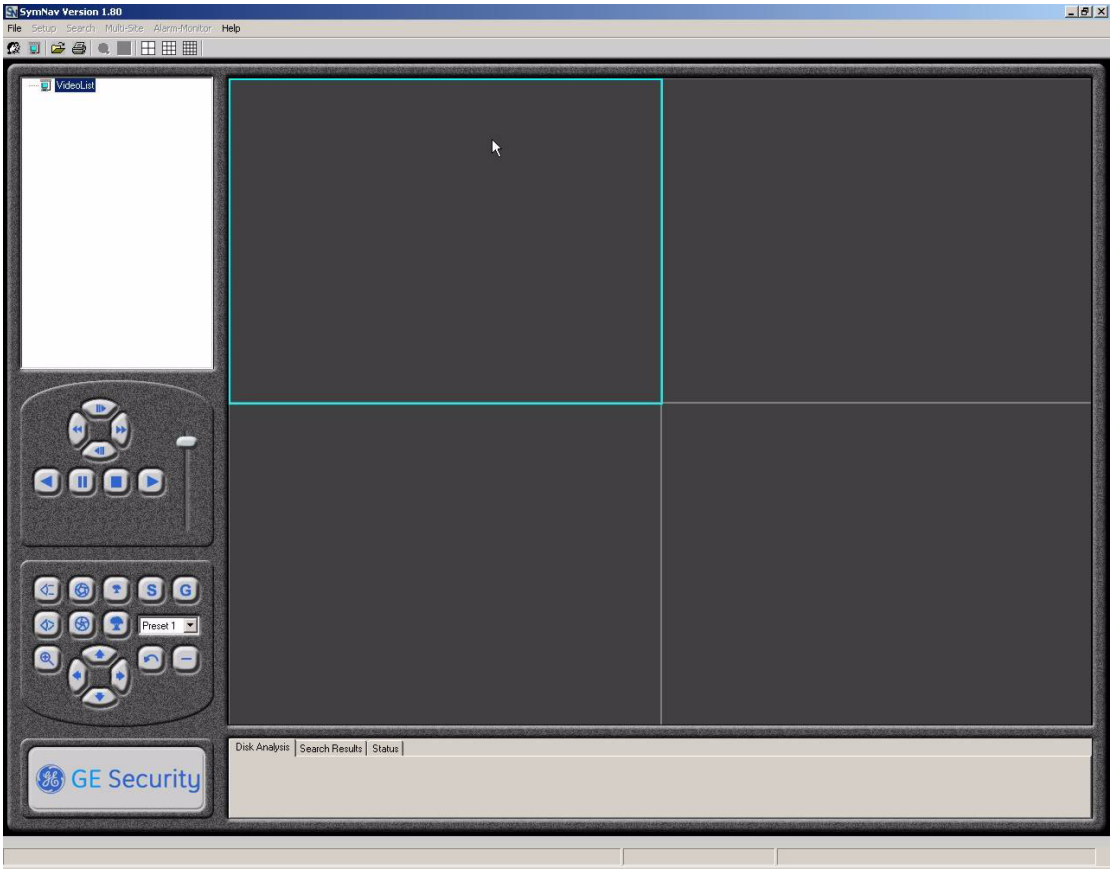
1. Place the SymNav CD in the CD-ROM drive of a PC that meets the minimum system requirements.
2. Follow the instructions for installation as they appear.

Note: If Autorun is not enabled on your PC, choose Run from the Start Menu, then type d:\setup.exe (where “d” is the drive letter of your CD-ROM) and click OK. Follow the instructions as they appear on your screen.

Starting SymNav

To start the SymNav program, double-click on the SymNav Desktop icon or choose **Programs** from the **Start** menu and then select **SymNav**. The Main window of the SymNav program will appear.

Figure 1. Initial SymNav screen



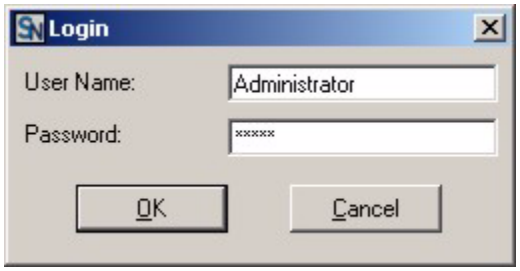
Logging In

To start using SymNav you must **Log In** and connect to a remote device through the address book. When logging in you will be asked for a **User Name** and **Password**. The default Administrator password is **12345**. The Setup menu becomes available after a successful login.

There are three ways to **Log in** and start using SymNav:

1. From the Menu Bar click **File**, then Log In. The Login screen will appear.
2. Click the **Login** icon on the Icon Bar. The Login screen will appear.
3. Click the **Connect** icon on the Icon Bar. The Login screen will appear. After a successful login the address book will appear. This login method is the quickest way to connect to a device.

Figure 2. Login Screen



GE recommends that the user name and password be changed after the installation is complete by the system administrator, see *The Security Menus* on page 30. As a security measure, store the password in the administrator's secure files or in a limited access area.

After a successful login, the Setup menu becomes available in the Main Menu The Setup menu contains the following menu items:

- The SymDec Menu Setup
- Security Settings
- **The Address Book**

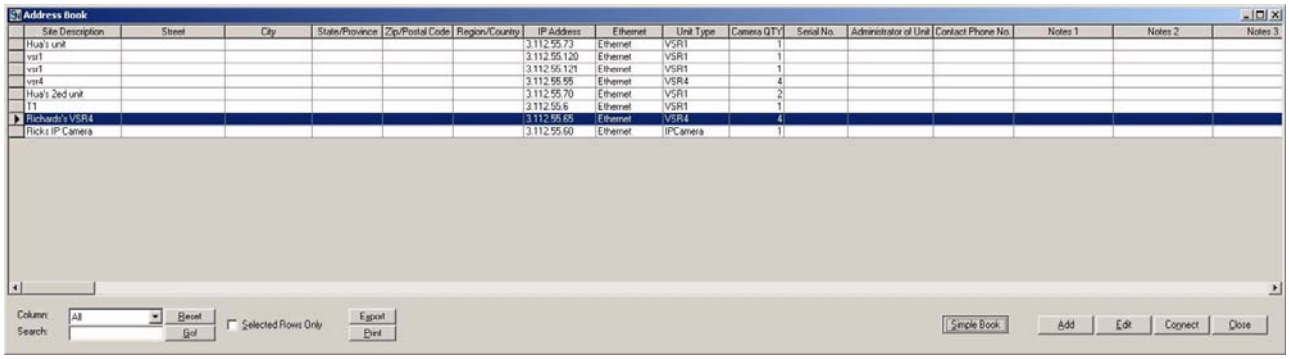
If you logged in using method 3 from above the address book will automatically display. If you used methods 1 or two, move your mouse to the menu bar and click on **Setup/Address Book**.

The Address Book is a comprehensive relational database consisting of the following fields:

- **Site Description**
- Street Address
- City
- State/Province
- Zip/Postal Code
- Region/Country
- **IP Address**
- **Ethernet** (Connection type)
- **Unit Type** (SymDec, Symnet, or IP Camera)
- **Camera Quantity**
- Serial Number
- Administrator of Unit
- Contact Phone Number
- Notes (4 fields)

The fields that are **bolded** above are the minimum amount of information that SymNav requires to connect to a remote device.

Figure 3. The Address Book

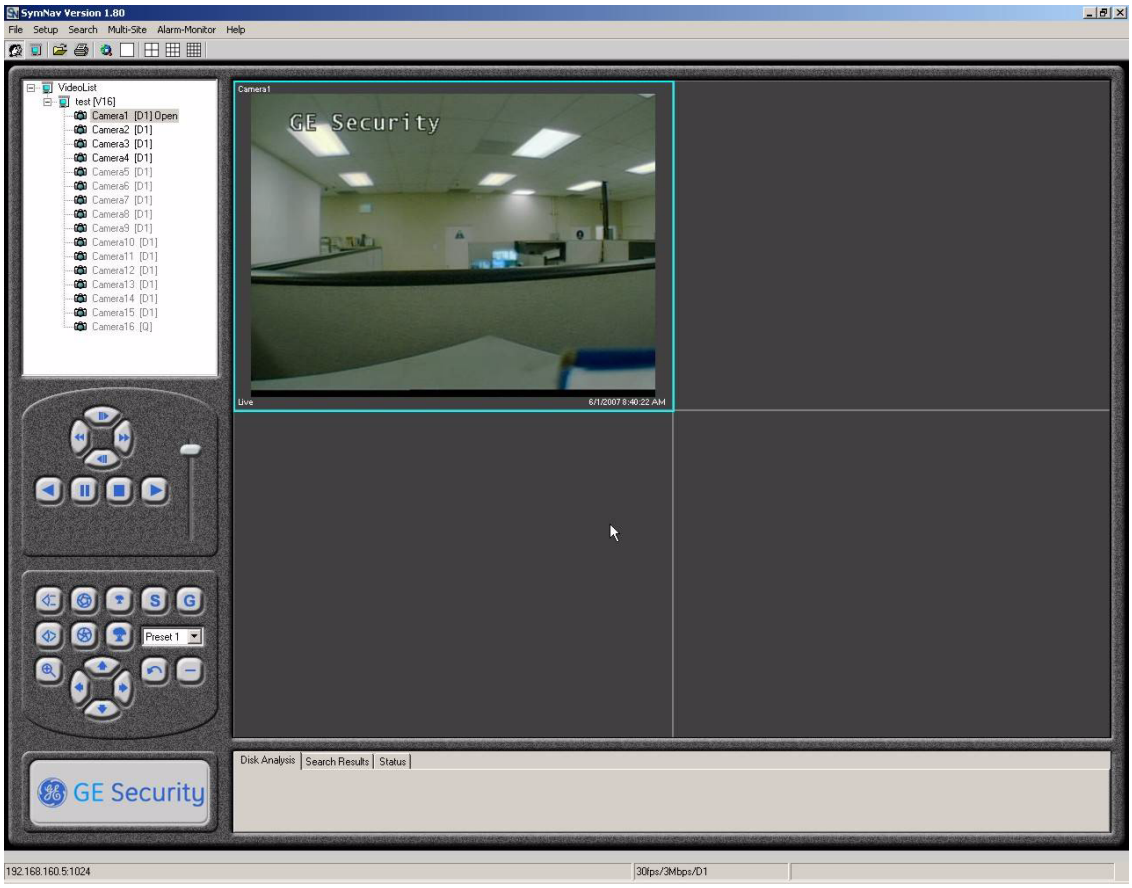


Connecting to a Site/Device via the Address Book

Highlight a selection on the Address Book and double-click or click on the **Select** button. SymNav will attempt to add the device/site to the site tree and start showing video using the parameters specified in the database (*see Figure 4*). See *Site Administration* on page 32 for information on creating and editing entries in the Address Book. If SymNav cannot connect to the device/site it will display a time-out message. Verify that the parameters in the Address Book are correct. If the parameters are correct verify that the PC can connect to the Internet or to another ethernet connected device.

Note: If no video is received and you are using windows XP, it may be because the XP firewall is enabled. To disable go to *Start/ Control Panel/ Network Connections*, right-click on *Local Area Connections* and select *Properties*. Click on the *Advanced* tab and disable the local firewall. The verbiage may vary depending on the XP service pack that has been installed.

Figure 4. SymNav Screen after a successful login



The figure above shows a connection to a SymDec 16 with 16 cameras and SpeedStream connected. SymNav can display a total of 16 video streams.

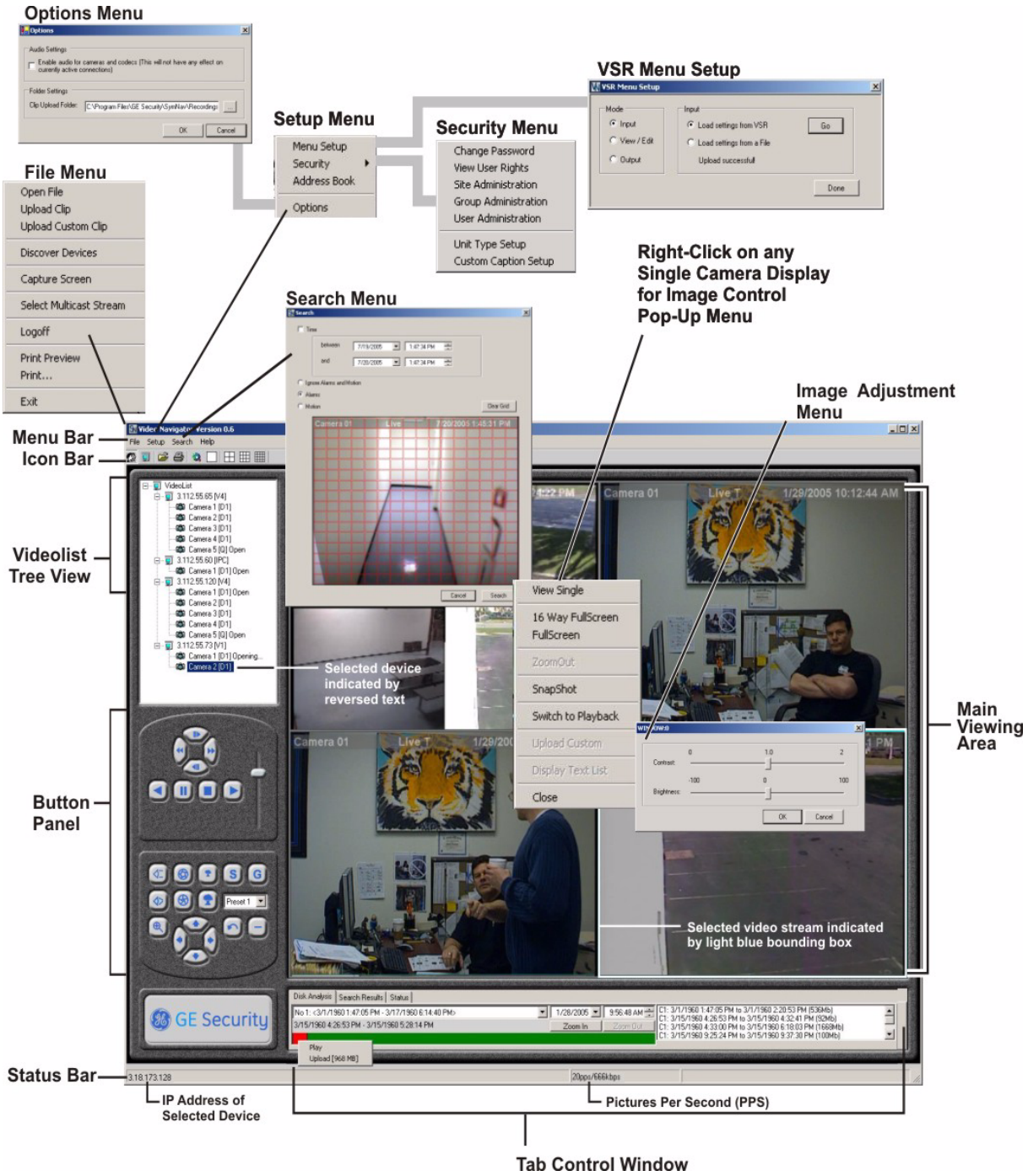
User Settings

After SymNav has been launched and exited it creates the *UserSettings.config* file in the SymNav directory. The *UserSettings.config* file is an editable text file that contains the following user settings:

- *<UseTCPSocket>true</UseTCPSocket>* The *true* statement tells SymNav to use TCP protocol. Change this to *false* to use UDP protocol.
- *<ClipUploaderFolder>C:\Program Files\GE Security\SymNav\Recordings</ClipUploaderFolder>* tells SymNav where to upload clips. Edit the path to redirect.
- *<MenuSettingsFolder>C:\Program Files\GE Security\SymNav\MenuSettings</MenuSettingsFolder>* Tells SymNav where to save the VSR menu settings. Edit the path to redirect.
- *<ShowImageAdjustments>false</ShowImageAdjustments>* The *false* statement disables the Image Adjustment pop-up window.

SymNav Reference

Figure 5. Main Window Overview



The Main Program Window

The Main program window consists of the following areas:

- **The Menu Bar:** At the top of the window.
- **The Icon Bar:** Underneath the Menu Bar.
- **The Videolist Tree View Window:** The white area in the upper left.
- **The Main Viewing Area:** The large main area.
- **The Status Bar:** At the bottom of the window.
- **The Button Panel:** The left side of the window.
- **The Tab Control Window:** Located under the Main Viewing Area.
- **Image Control Pop-Up Menu:** Right-click on a Single Display.

The Menu Bar

The Menu Bar provides access to the programs functions and parameters, as well as access to files.

The Icon Bar

The Icon Bar provides one-click access to program functions and parameters, as well as access to files.

Figure 6. The Icon Bar

1.	Log in: Use to log in to a unit.
2.	Connect: Displays the address book window.
3.	Open files: Opens mpc files for playback.
4.	Print: Prints images displayed in the main viewing area.
5.	Search menu: Launches the search dialog window.
6.	View single icon: Displays single screen view.
7.	View quad icon: Displays quad screen view.
8.	View 9-up icon: Displays 9-up screen view.
9.	View 16-up icon: Displays 16-up screen view. For low bandwidth connection.

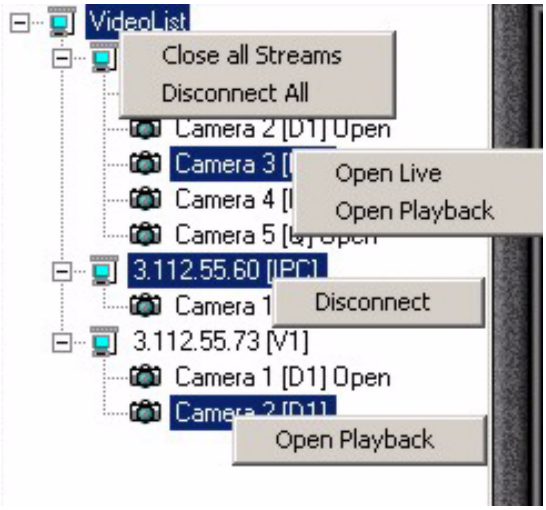
The Videolist Tree View

Remote sites are displayed in an expandable/collapsible tree view. An entry for each camera stream it finds is created. When connecting to a SymDec-4 SymNav adds an additional entry (SpeedStream) which functions as a quad (Q) stream. Whenever SymNav connects to a SymDec or SymDec-4 and it detects an IP camera it will

also create an entry. The IP camera stream will be numbered incrementally after the last camera number that it finds. Right-clicking on a particular entry will display a pop-up menu with connect/disconnect options depending on the unit's current status. See the following figure for all the available commands.

Note: In a real world environment only one device can be highlighted at a time.

Figure 7. Treelist view commands



The Main Viewing Area

Video is displayed in this area. Video display order is according to the information encoded by the unit used to create the original video data file. Currently selected video is indicated by a light blue bounding box.

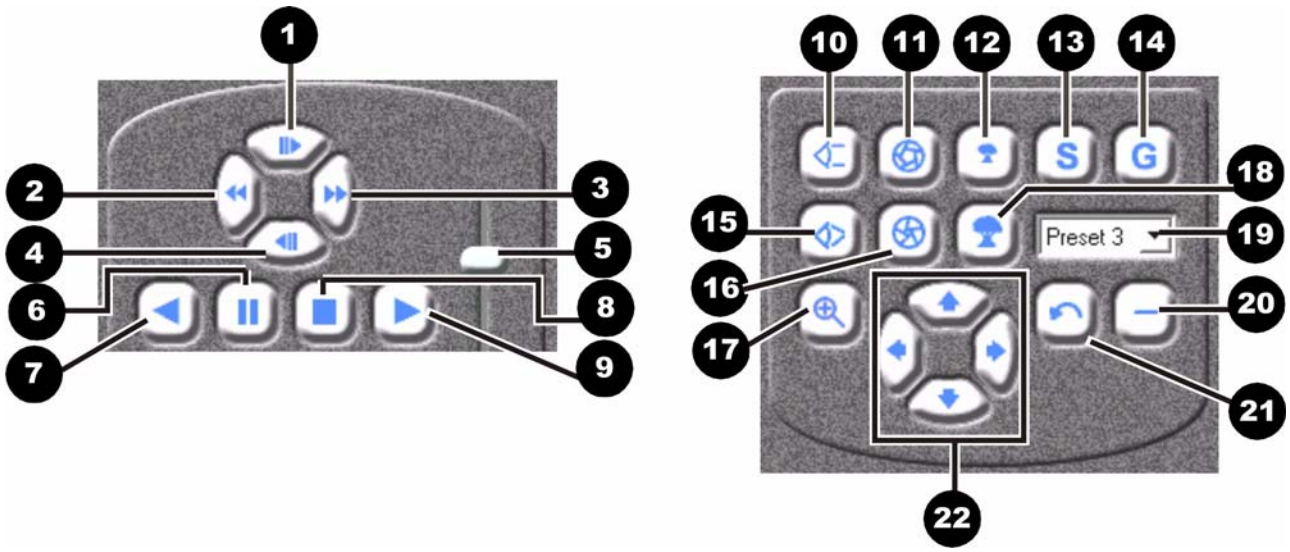
The Status Bar

The Status Bar displays messages and current connection status information such as the IP address and recording speed in pictures per second (pps). If the user is viewing data recorded as files on a CD-ROM or stored on the user's PC, the path name information is displayed on the status bar.

The Button Panel

The top button panel contains various controls for camera selection, viewing and playback. The bottom button panel controls the various features available with PTZ (pan. tilt, and zoom) cameras. Please see your dome or PTZ camera installation manual for setup information.

Figure 8. The button panel



1. **Single Frame Advance button:** Click on this button to advance the video a single frame. This button is inoperative in live mode.
2. **Reverse Play button:** Clicking on this button in live mode will switch the mode to playback and execute high-speed reverse playback. Click on this button during playback mode to perform high-speed reverse playback.
3. **Fast Forward button:** Click on this button to perform high-speed playback. This button is inoperative in live mode.
4. **Single Frame Reverse Play button:** Clicking on this button in live mode will switch the mode to playback and reverse play a single frame. Click on this button during playback mode to reverse play a single frame.
5. **Volume Control:** Slide this up and down to control the volume.
6. **Pause button:** Pauses playback until the pause button is pressed again. Clicking any of the buttons, except stop will also resume playback.
7. **Play Backward button:** Clicking on this button in live mode will switch the mode to playback and play video in reverse. Click on this button to playback video in reverse.
8. **Stop button:** Click on this button to halt all playback operations.
9. **Play Forward button:** Click on this button to playback video. This button is inoperative in live mode.

   Note: The following controls are only available when connected to a working PTZ camera.

10. **Focus Far:** Click and hold the Focus Far button to operate lens focus.
11. **Iris Open:** Click and hold the Iris Open button to lighten the image, and adjust for changing light conditions.
12. **Zoom Out:** Click and hold the Zoom Out button to operate the camera lens zoom.

13. **Set Preset:** Navigate the camera to the desired location, select the desired preset from the drop down list box, then click **Set**.
14. **Go To Preset:** Navigate the camera to the desired location, select the desired preset from the drop down list box, then click **Set**.
15. **Focus Near:** Click and hold the Focus Near button to operate lens focus.
16. **Iris Close:** Click and hold the Iris Close button darken the image, and adjust for changing light conditions.
17. **Auto Zoom In:** Not currently implemented.
18. **Zoom In:** Click and hold the Zoom In button to operate the camera lens zoom.
19. **Preset Drop Down List:** Drop down list of preset camera positions created with the **Set Preset button**.
20. **Zoom All:** Not currently implemented.
21. **Return – Previous button:** Not currently implemented.
22. **Pan Buttons:** Click on the buttons to pan the camera in the direction indicated.

Entering PTZ Mode

SymNav provides Pan/Tilt/Zoom capabilities. To access the PTZ controls from SymNav, the following conditions must be met:

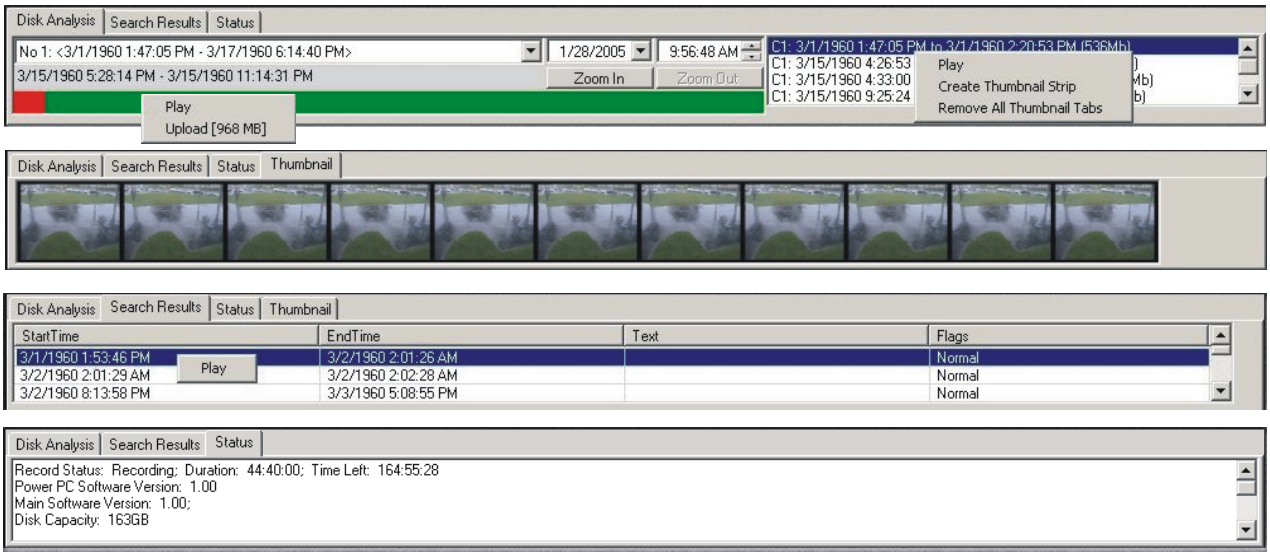
- SymNav must be connected to a SymDec/SymDec-4 capable of interpreting the PTZ commands.
- The SymDec unit must be connected to a ProBridge PTZ controller. The SymDec-4 does not require a ProBridge PTZ controller.
- The cameras must be capable of performing PTZ.

The SymNav must establish a normal connection, and must be in live mode.

The Tab Control Window

This tabulated window contains information such as **Disk Analysis**, **Thumbnail views**, **Search Results**, and Unit **Status**. Click on the tab to change the view and the information. Disk Analysis, Thumbnail views, and Search results are only available in playback mode. Right-clicking on various hot spots brings up selected commands as shown below.

Figure 9. Tab control window modes



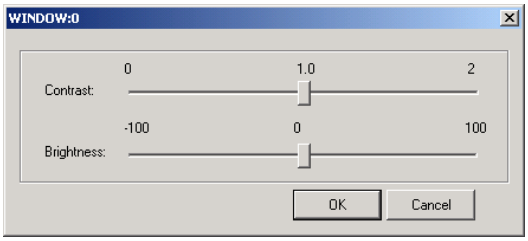
The Image Control Pop-up Menu

Right-click on any single camera display in the main viewing area and the **Image Control** Pop-up menu appears. Select any command to perform the selected action on the current image.

The following action are available on this menu:

- View single (This mode supports a digital zoom; see *Digital Zoom below*)
- 4-way, 9-way, or 16-way Full screen: dependant on current mode
- Full screen
- Zoom Out (This option is grayed out until a zoom in has been executed)
- Snapshot
- Image Adjustments (A pop-up window appears if enabled and your video card supports this feature) See *User Settings* on page 6 to enable this feature. Contact GE technical support for a current list of supported video cards.
- Switch to Live/Playback (depending on current mode)
- Overlay Retail Text
- Display Text List
- Close (closes the selected stream)

Figure 10. Image adjustment screen



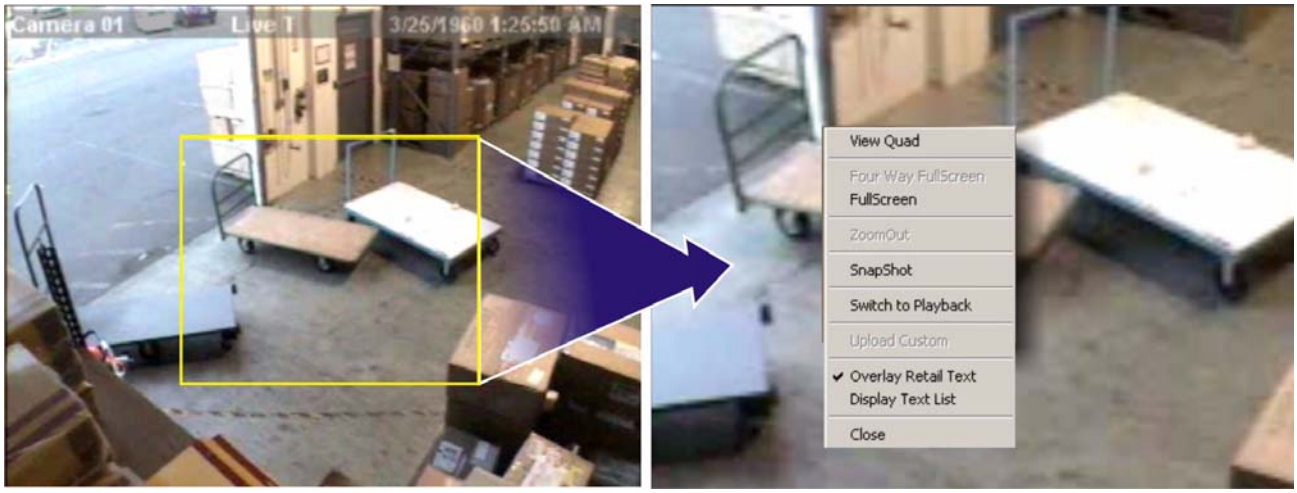
The Image Adjustment screen displays contrast and brightness controls for the currently selected video. If your video card does not support this feature a dialog box will display saying that this feature is not supported.

Digital Zoom

The digital zoom feature is enabled when you select *View Single* from the Image Adjustment window. Click-drag a rectangular area on which to zoom in. When you release the mouse button the image will zoom in to the selected area. Right-click on the screen to bring up the Image Adjustment window. *Zoom Out* is now enabled. Select *Zoom Out* to return to the previous screen.

Note: When the SnapShot command is performed while viewing a stream that has been digitally zoomed (in either quad view or actual size mode), the captured image represents the entire frame rather than just the zoomed part of the image.

Figure 11. Digital zoom

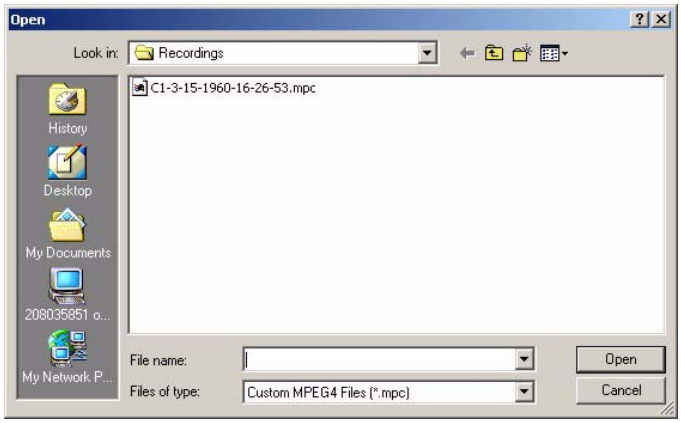


The File Menu

Open File

From the Menu Bar, click **File**, then click **Open File** or click the **Open** icon on the Icon Bar. The Open files window will appear (depending on the operating system, some windows may differ from the one shown here).

Figure 12. The Open file dialog box



1. Select the drive and the directory which contains the saved video files.
2. The long file names identify the time and the date of the recording, and the order in which they were placed on the storage medium.

The following file format is used by SymNav:

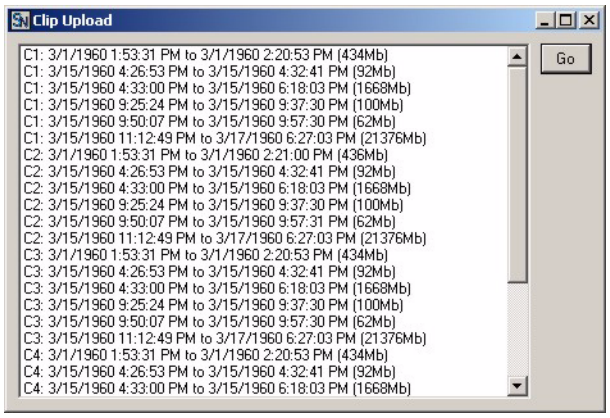
- **.mpc** is a proprietary MPEG-4 video file containing addition information such as camera title, date, time, alarm flags and text.

During the playback of a file a playback pointer will display in the upper right corner of the tab control window.

Upload Clip

From the Menu Bar, click **File**, then click **Upload Clip** and the Clip Upload requestor box will open.

Figure 13. Clip Upload Window



Select a clip to upload to your *recordings* directory by clicking on a entry. Ctrl-clicking, shift-clicking, or clicking and dragging are also supported selection methods. Click **Go** to initiate the upload. All viewing and playback will stop until the upload is completed. A progress bar will display during the upload.

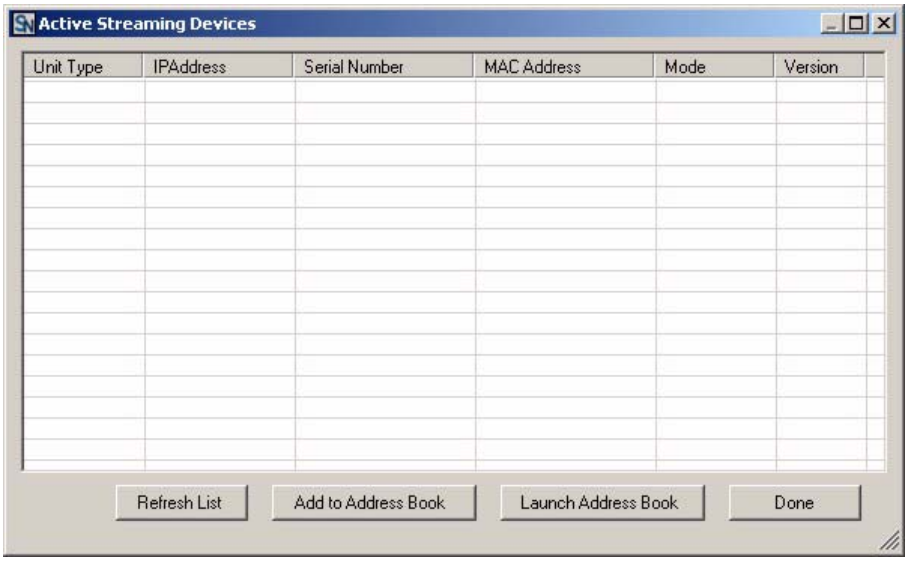
Capture Screen

From the Menu Bar click **File**, then **Capture Screen**. SymNav will open a **Save Screen Shot** dialog box. Enter the file name and select jpg or bmp as the file type and click save to capture the images in the main viewing area.

Discover Devices

From the Menu Bar click on **File**, then Select **Discover Devices**. This command opens a dialog box allowing you to find any active streaming devices.

Figure 14. Discover Devices Window



Select Multicast Stream

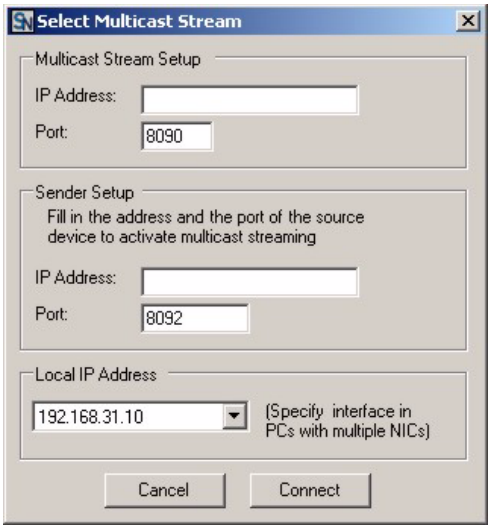
From the Menu Bar click on **File**, then **Select Multicast Stream**. This command opens a dialog box allowing you to specify the sender's IP address and port, the multicast address and the multicast port number.

The **Multicast Stream Setup** fields are for inputting the multicast address and port where the multicast stream is going to be broadcast from. Multicast addresses are a group of IP addresses specifically reserved for multicast traffic. These addresses range from 224.0.0.0 through 239.255.255.255. Make sure the correct multicast address is entered. If an incorrect, but valid multicast address, is entered no video or error messages will be received.

If the **Sender Setup** fields are left blank the sender must already be streaming video and SymNav must be set to the same multicast address and port. Inputting the sender's IP address and port along with the multicast address and port and then clicking the Connect **button** sends a *Start* command to the sender. Assigning these numbers requires specific knowledge of Internet and Multicast protocols.

The **Local IP Address** drop-down box is for systems with two or more NICs (Network Interface Cards. To receive multicast video, you have to explicitly choose the local network card that is connected to the network on which the sender is multicasting.

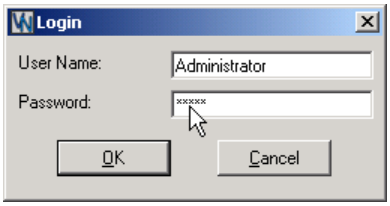
Figure 15. Open Mulicast Stream window



Login/Logoff

From the Menu Bar click on **File**, then **Login**. Type in the correct user name and password (12345) and click OK. The Setup menu and address book will become accessible for use. After login the login command changes to logoff.

Figure 16. The Login dialog box



Print Preview

From the Menu Bar click on **File**, then **Print Preview**. The Print Preview window will appear showing you how your printout will appear. Click on the printer icon to print or the close icon to exit the window.

Print

From the Menu Bar click on **File**, then **Print**. This command will display the Print dialog box. Select **OK** to print the images currently displaying in the main viewing area. You can also select from any number of installed printers.

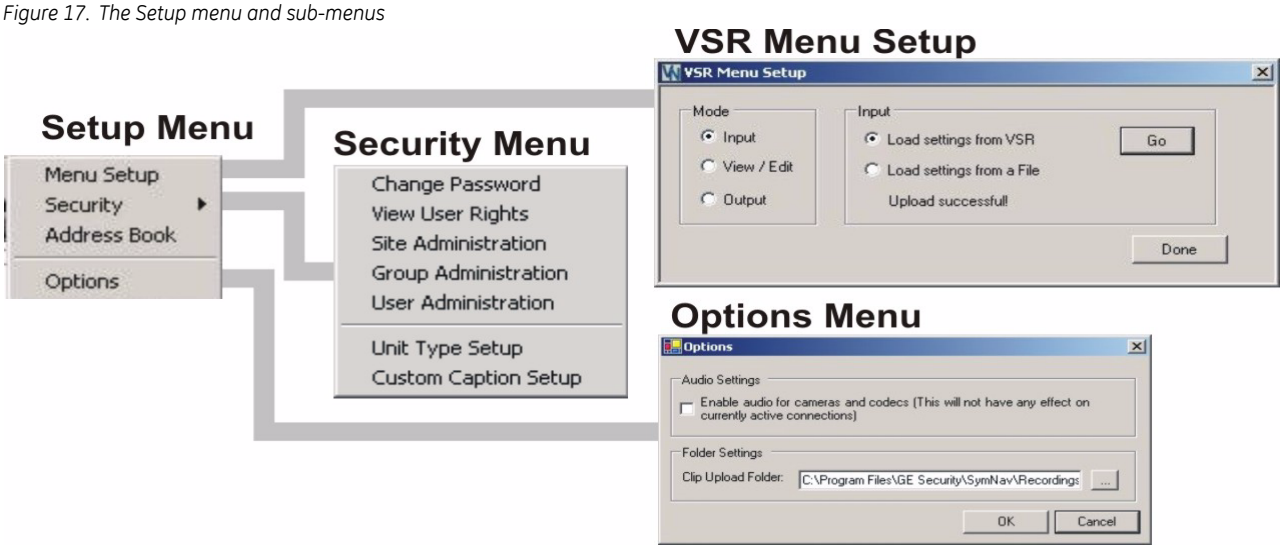
The Setup Menu

The Setup menu is not enabled when the program first starts. It is enabled only after a successful login.

The following menus are available in the Setup Menu:

- Menu Setup
- Security
- The Address Book
- The Options menu

Figure 17. The Setup menu and sub-menus



Menu Setup

These menus are used to setup and remotely configure the SymDec, SymDec-4, or SymDec 16 plus 4. Clicking on the **Menu Setup** command launches the **SymDec Menu Setup** window. When this window first appears only the input mode is enabled. You first must load the SymDec settings from a connected SymDec or a previously saved (from the output mode) file containing the SymDec settings. Clicking **Go** loads the settings and enables the **View/Edit** and **Output** modes.

Selecting the **Output** mode radio button allows you to write the loaded settings into a file or directly to a connected SymDec. Selecting the **View/Edit** mode launches a series of setup screens which are selectable by type. The following parameter types are available:

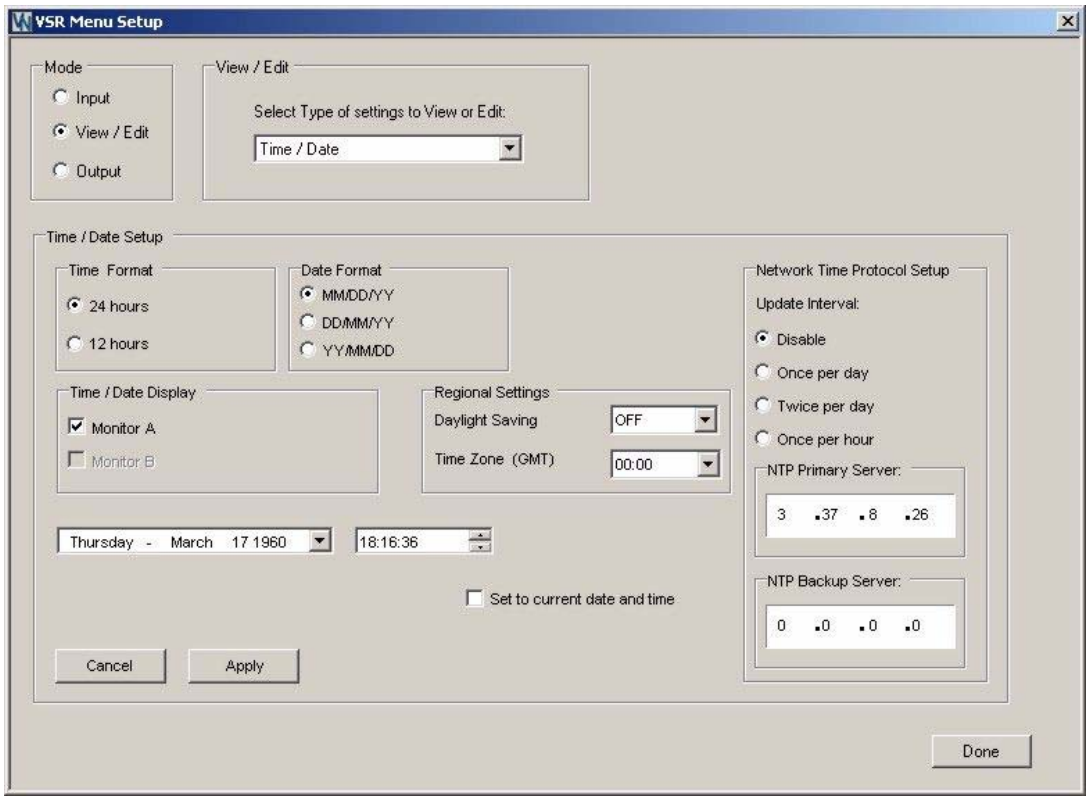
- Time/Date
- Sequence
- Alarm
- Record Timer
- Record Settings
- Camera Title
- Display Settings
- Advanced Settings
- Setup Active Zones

For specific details on what each parameter does please see the SymDec or SymDec-4 user manual.

Note: You must click the **Apply** button on every screen for any changes to be saved.

Time and Date Setup Options

Figure 18. Time/Date Setup screen



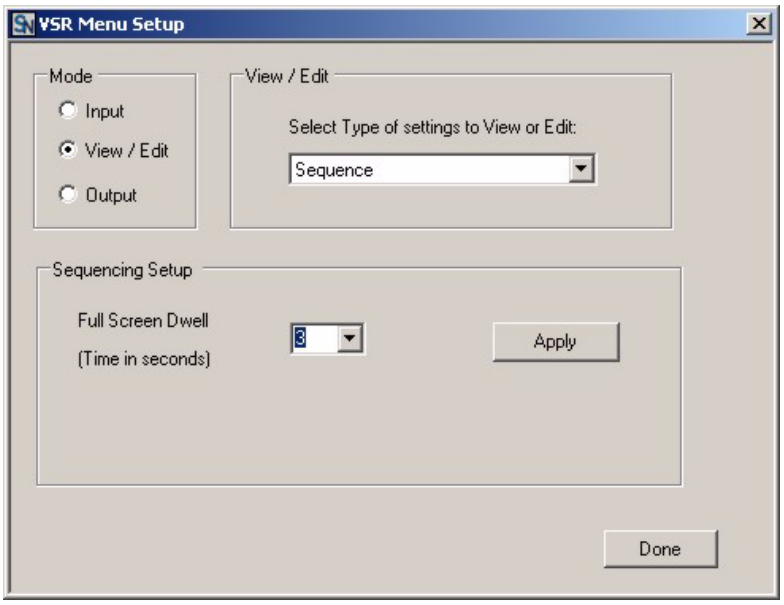
This screen contains the following setup options:

- The time and date formats.
- The option to display the time and date on the output monitor.
- Regional Settings such as Daylight Savings time and Time Zone.
- The current time and date.
- Network Time Protocol Setup

Click **Cancel, Apply,** or **Done** when satisfied with your changes.

Sequence Setup Options

Figure 19. Sequence setup screen

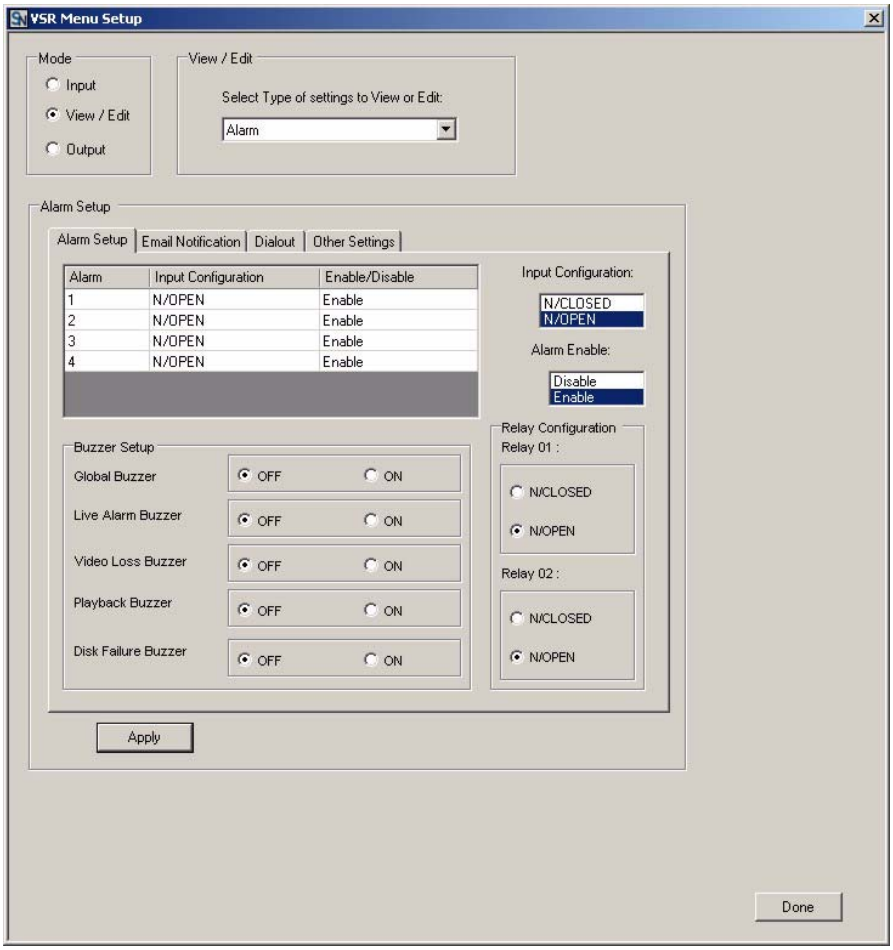


This screen allows you to set the dwell time between the sequencing of camera views. Click **Apply** for the changes to take effect.

Alarm Setup Options

The Alarm type of setup options contains tabbed selections grouped by similarity. The first tab is the **Alarm Setup** tab.

Figure 20. The Alarm Setup tab

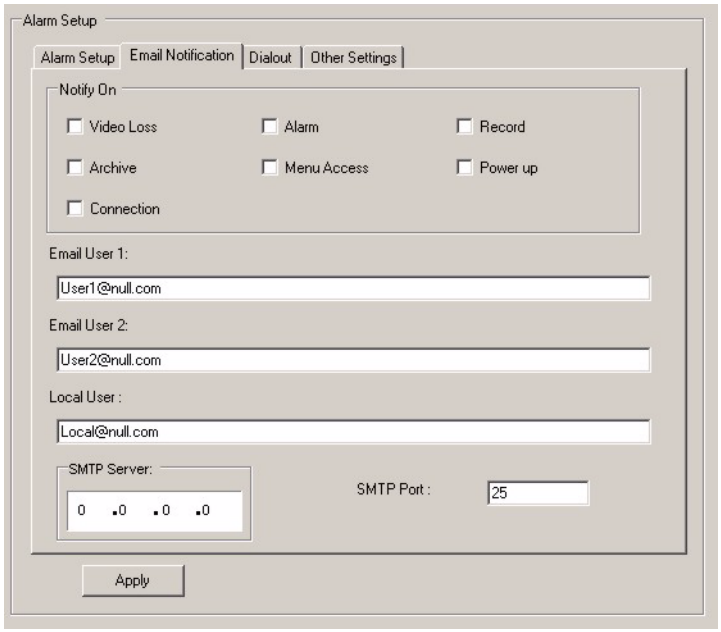


This screen contains the following setup options:

- Alarm configuration by alarm input, the input configuration, and whether to enable or disable the alarm.
- Buzzer setup.
- Relay configuration.

Click **Apply** for the changes to take effect. The next tab is the Email Notification setup screen.

Figure 21. Email Notification Setup

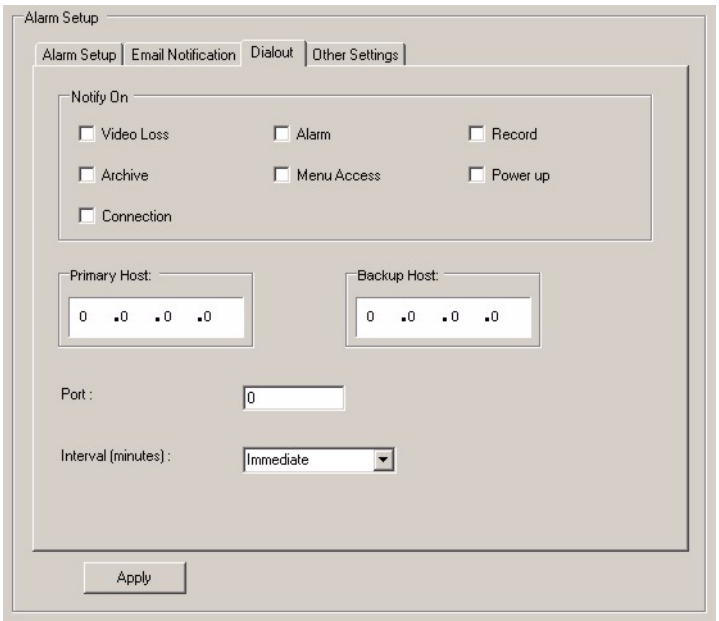


This screen contains the following setup options:

- Selection of the change condition on which you wish to be notified.
- The email addresses' of the users to be notified.
- The SMTP server's IP address and the SMTP port to send the notification.

Click **Apply** for the changes to take effect. The next tab is the Dialout settings setup screen.

Figure 22. The dialout settings setup screen

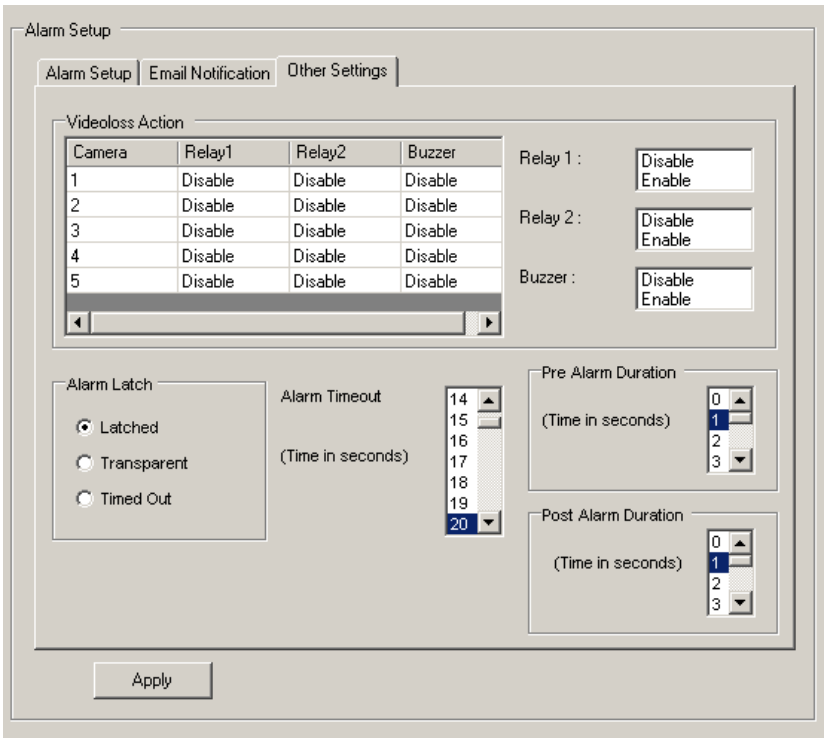


This screen contains the following setup options:

- Selection of the change condition on which you wish to be notified.
- The TCP/IP addresses' of the Primary and Backup hosts to be notified.
- The TPC port number and the time interval of notification.

Click **Apply** for the changes to take effect. The next tab is the Other settings setup screen.

Figure 23. The Other Settings Setup Screen



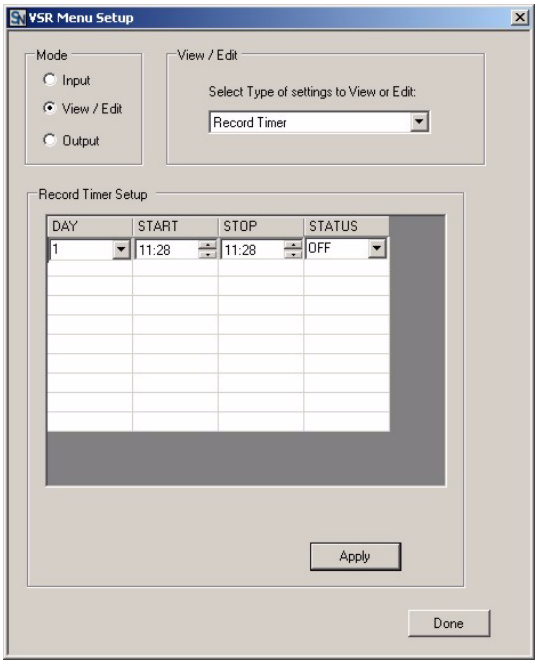
This screen contains the following setup options:

- Relay and buzzer setup during videoloss by camera.
- The type of alarm latching.
- Alarm time-out in seconds.
- The pre and post alarm duration.

Click **Apply** for the changes to take effect.

Record Timer Setup Options

Figure 24. Record timer screen



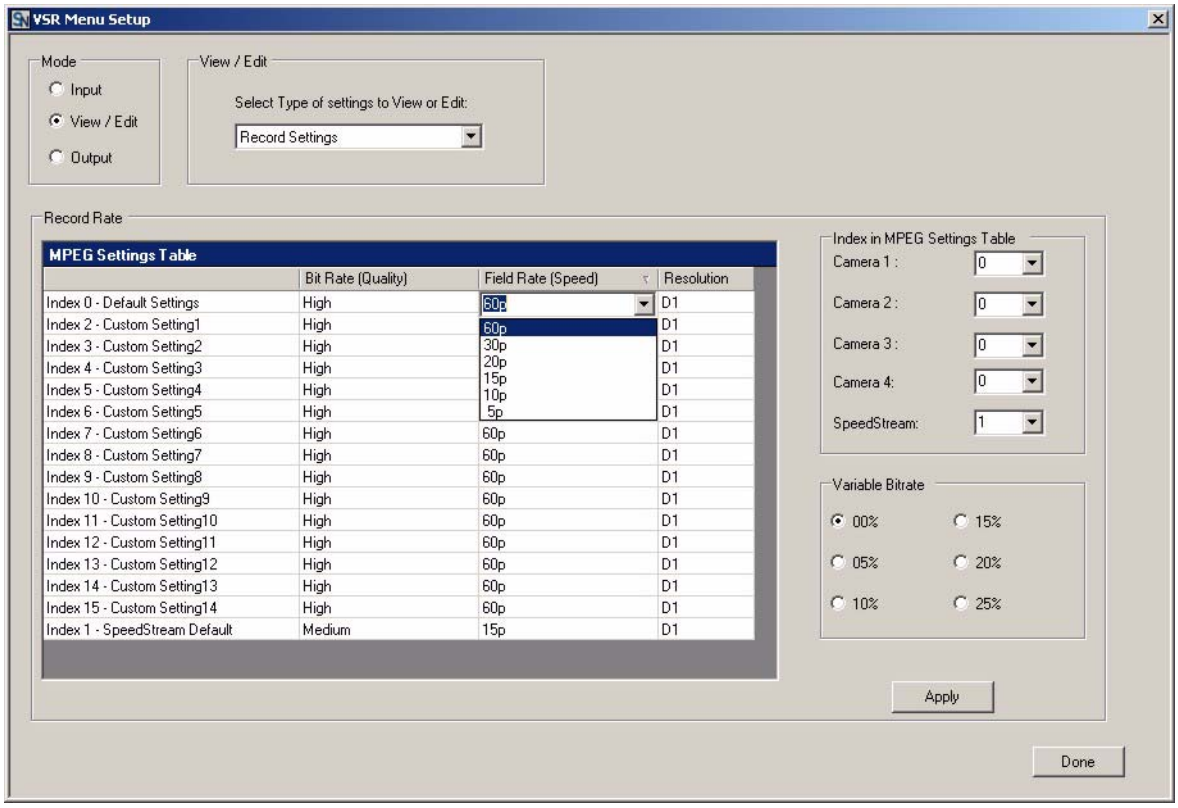
This screen contains the following setup options:

- The day to record
- Record start and stop.
- Turn on or off this group of timer settings.

Click in the fields to display drop-down boxes for data selection. Click **Apply** for the changes to take effect.

Record Settings

Figure 25. Record settings screen



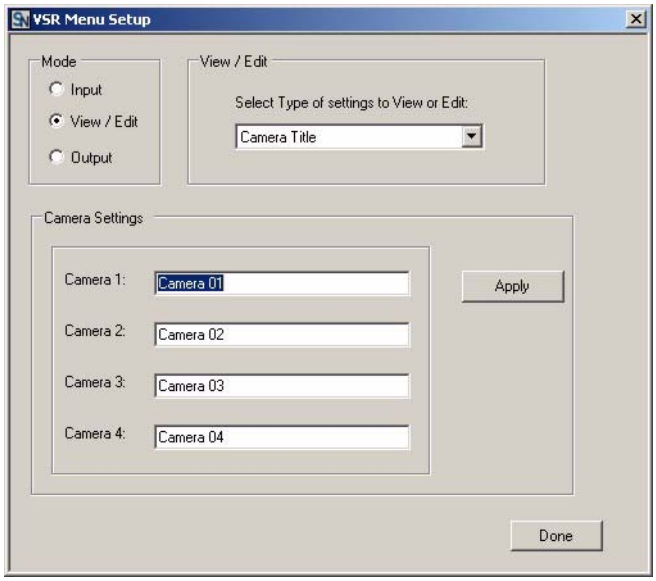
This screen contains the following setup options:

- The MPEG settings table. This table lets you setup a matrix of various recording parameters that you can apply to different camera.
- Camera selection to apply the MPEG settings in the matrix.
- The percentage to set the variable bitrate.

Click in the fields to display drop-down boxes for data selection. Click **Apply** for the changes to take effect.

Camera Title Options

Figure 26. Camera title screen

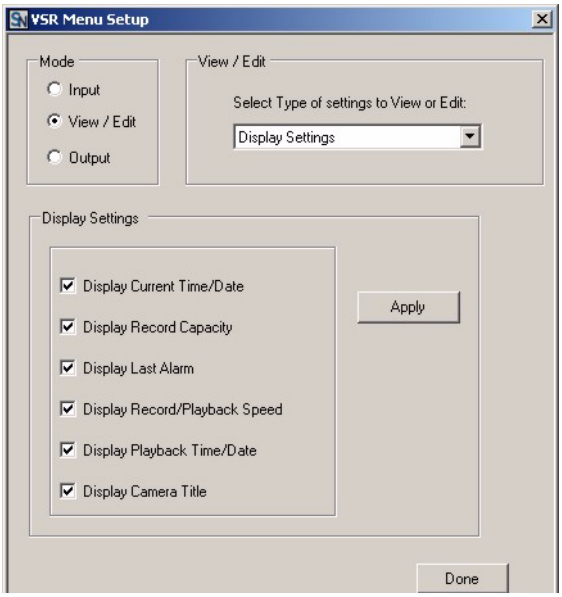


This screen contains a way to change the camera title display.

Click **Apply** for the changes to take effect.

Display Settings

Figure 27. Display settings screen



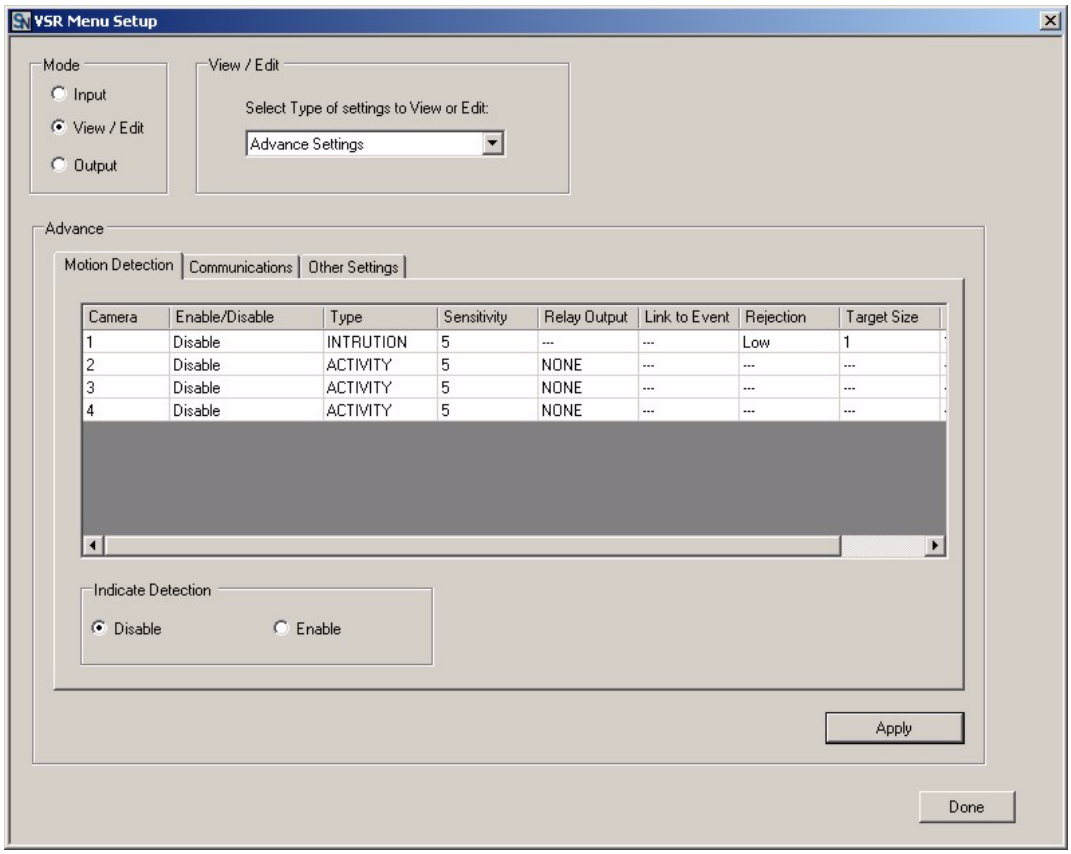
This screen gives you the choice of what information you want displayed on the output monitor.

Click **Apply** for the changes to take effect.

Advanced Settings

The Advanced settings setup options contains tabbed selections grouped by similarity. The first tab is the **Motion Detection** tab.

Figure 28. Advanced settings screen motion detection tab



Use this screen to setup the various motion detection parameters by camera.

Activity Vs. Intrusion

Activity detection is a simple type of motion detection having only a sensitivity setting and a relay output. Intrusion detection is a more sophisticated type of motion detection, with additional features such as false alarm rejection levels, minimum target size, and an alarm output.

Activity Detection Setup

If **Activity** is selected in *Type* field, the following parameters are enabled:

Relay Output: The unit may be configured to activate a relay output when motion detection is present. Select either **1**, **2**, **1+2** (both relays), or **none**.

Link to Event: Selecting **Yes** in this menu will activate the event record speed when activity detection is present.

Intrusion Detection Setup

If **Intrusion** is selected in *Type* field, the following parameters are enabled:

Sensitivity: Use the arrow buttons to change the motion detection sensitivity, 10 being the most sensitive.

Rejection: Configure the unit's false alarm rejection feature by selecting **Low**, **Medium**, or **High**. These settings are based on the number of simultaneously triggered zones and the persistence of motion in a scene. The low setting is the most sensitive to motion. The medium setting will filter out most false alarm situations due to sudden luminance changes over the whole scene (clouds passing over). The high setting will filter out sudden luminance changes as well as spurious motion events that do not persist for a number of frames (a bird flying past the lens).

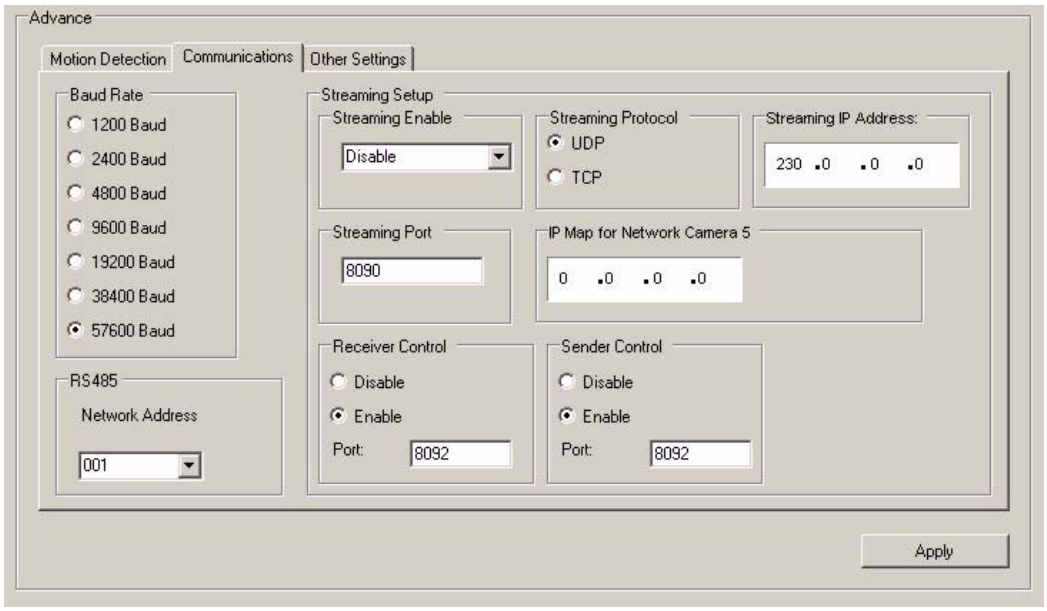
Target Size: This setting is the minimum number of zones (from the 16 x 16 grid) that must be activated simultaneously before it is considered to be valid motion.

Link To Alarm: Select the alarm number that you wish to activate when motion detection is activated.

Click in the fields to display drop-down boxes for data selection. Click **Apply** for the changes to take effect.

The next tab is the **Communication** screen.This screen contains RS232 serial port baud rate and RS485 network ID selections. This screen also contains various Streaming setup parameters. For a comprehensive streaming overview see the Symdec user manual.

Figure 29. The Communication screen



Click **Apply** for the changes to take effect.

The next tab contains disk overwrite mode and auto delete mode selections.Click **Apply** for the changes to take effect.

Figure 30. Other settings screen

The Security Shell

Security Shell Overview

The Security Shell is designed to provide controlled access to multiple Digital Recorder units by multiple users. The following definitions are used in the discussion below:

- **User:** A person that uses the SymNav to review data stored on a Digital Streaming Recorder (DSR).
- **Group:** A collection of users that have specific access rights to a specific list of Sites.
- **Site:** A specific digital recorder with a unique IP address.

Users are assigned to specific Groups. Any number of Groups can be defined. Every user can only belong to one Group. The default Group is called the Administrator group and cannot be deleted from the database. Users that are assigned to the Administrator Group have full access rights to all Sites in the Database. The Administrator is the default user in the Administrator group. Examples of Groups names would be: Management, Engineering, Supervisor and Shipping.

Only Users who belong to the Administrator Group have access to all administrative functions – all other users are only allowed to change their own passwords and to view their user rights.

All groups except the Administrator group have specific sites that are associated with them. Every Site in the database can be associated with any number of Groups. A Group also has access rights that can be set up that apply to all Sites in the Group. A Supervisor Group for example might have the right to do Pan, Tilt and Zoom on all Sites associated with the group.

A Group may also be set up to have unique access rights on a per Site basis. The administrator can specify for each site belonging to the group, which cameras can be viewed by the group's users. For example, the users

that belong to group ‘A’ can only view cameras 1 and 2 from a specific site whereas users belonging to Group ‘B’ are only allowed to view cameras 3 and 4 from the same site.

Using the Security database from multiple computers.

When SymNav has been installed on several networked computers, it is possible to use only one central database that can easily be maintained by the Administrator.

During the installation of SymNav on a clean Computer, the Security Database is copied to the SymNav folder. The filename is *vrsecurity.mdb*. This file can be moved to a drive on the network that can be accessed from the PC. The SymNav then has to be instructed where the database is located. This is done as follows:

Using any ASCII editor like Notepad, open the file *vnconfig.dat* that is located in the SymNav folder. Edit or add the following line to reflect the new position of the database on the network: (The part following the ‘=’ is the network path of the *vrsecurity.mdb* file).

SECURITY_DB_PATH_AND_FILENAME = D:\your folder\vrsecurity.mdb

Be sure to remove the letters “REM” that may come before the string. The next time SymNav is launched it will get its Security settings from the network database. Several Computers can be set up this way to simultaneously access the same database file.

If the *vrsecurity.mdb* file is not moved to the network, each SymNav will simply access the database on its local hard drive and the site and user information will have to be added to every database individually.

Additional Notes

It is recommended that the Administrator always add at least 1 user beside himself to the Administrator group. If he forgets his password, the other user can still log in and reset the Administrator’s password. If all users in the Administrator group forget their passwords, they would have to contact GE Technical Support to have their passwords reset.

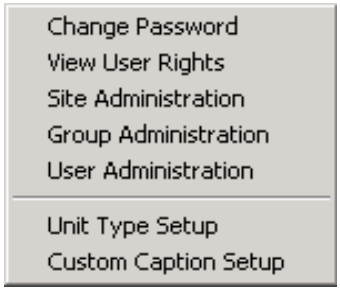
Uninstalling SymNav from a PC will not remove the *vrsecurity.dat* file or the *vrsecurity.mdb* database file from the SymNav folder. When the new SymNav is installed, a user will be able to log into the old database without any additional setup.

The Security Menus

SymNav features extensive security and administrative options. From the Menu Bar click **Setup**, then **Security**. The following options are available:

- Change Password
- View User Rights
- Site Administration
- Group Administration
- User Administration
- Unit Type Setup
- Custom Caption Setup

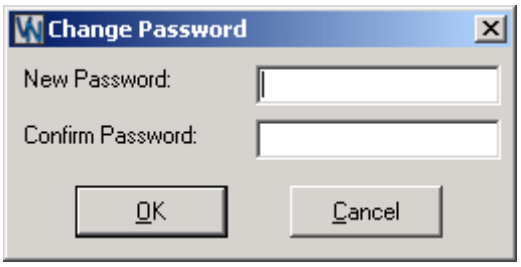
Figure 31. The Security Menu



Change Password

It is recommended that the default password be changed after installation is complete. By default, the password is 12345 when the software is first installed. As a security measure, store the password in the administrators secure files or in a limited access area.

Figure 32. The Change Password Dialog Box



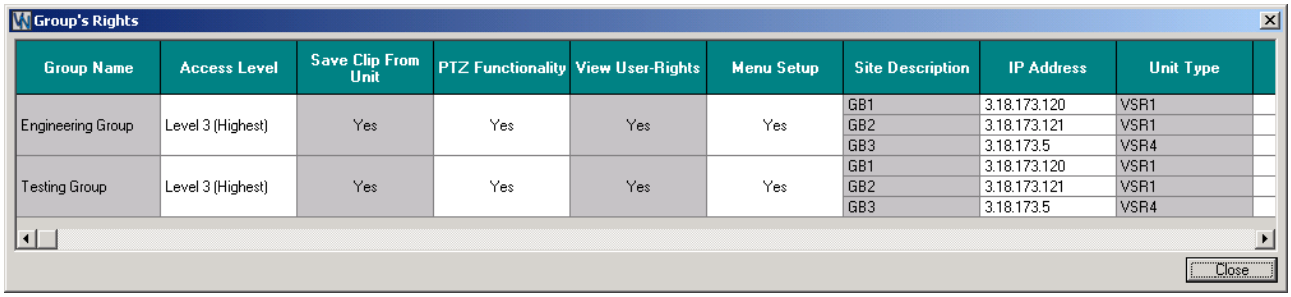
To change the Password, select **Setup Menu/Security/Change Password** from the menu bar. The Change Password requester box will appear.

- Click in the box labeled **New Password**.
- Type in the new password.
- Click in the box labeled **Confirm Password**.
- Type in the new password again.
- To complete the selection, click the **OK** button. If the new password was accepted the Password Accepted box will be displayed.
- If the **Cancel** button is chosen, the password will not be changed.

View User Rights

To View User Rights, select **Setup Menu/Security/View User Rights** from the menu bar. The Group's Rights window will be displayed. This window provides a quick overview of User and Group rights that have been setup in the **Group Administration** database. No editing functions may be performed in this window.

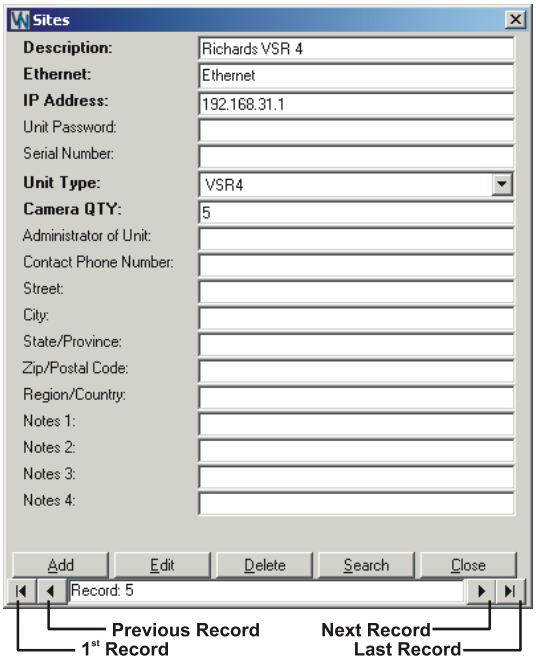
Figure 33. Group's Rights Window



Site Administration

Site Administration provides all the data required for the creation of the **Address Book**. To access Site Administration, select **Setup Menu/Security/Site Administration** from the menu bar. The Sites Edit window will be displayed.

Figure 34. The Sites Administration Window



Creating the Site Address Book

This window allows the user to:

- **Add** new device/site information. Required fields are **Bolded**.
- **Edit** existing records.
- **Delete** existing records.
- **Search** through current records by the Site Description, IP/Phone Number, Street, City, State/Province, Zip/Postal Code, or Region/Country fields.

Creating an Address File (for basic information)

The Address Book file may be created using any text edit such as Notepad. A sample address book may look like the following. Be sure to save or rename the file with the extension, **.lst**. Once created the user can import the file using the previous procedure.

Figure 35. Address Book Import File

```
1000
3
0,”10.90.253.129”,”Alex’s unit”,”12345”
0,”10.90.10.110”,”Demo Room”,”54321”
0,”10.90.253.28”,”Test unit”,””
```

The first line (1000): Indicates a version number used by SymNav to identify this list. Do not edit this number.

The second line (3): Indicates the number of addresses in the list. Change this number only if the number of address in the list changes.

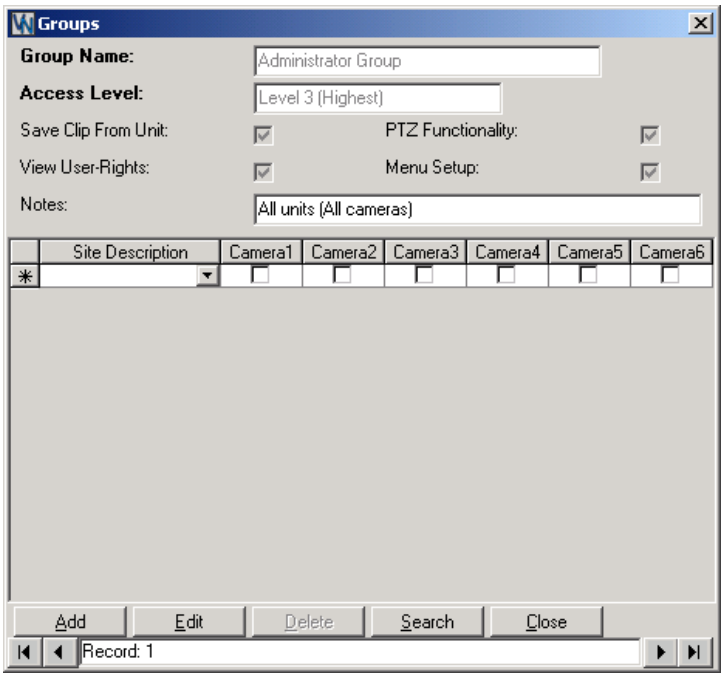
The Address lines indicate the following 4 items:

- This unit is connected via ethernet (indicated with a 0), or this unit is connected via a modem (indicated with a 1).
- The IP address or telephone number of the remote unit (example IP address show above "10.90.253.129")
- The name given to the remote unit (Example: “Alex’s unit”)
- The password for connecting to the remote unit (Example: “12345”). This field is not always populated.

Group Administration

Group Administration provides all the parameters required to set up various group rights and access levels. To access Group Administration, select **Setup Menu/Security/Group Administration** from the menu bar. The Groups Edit window will be displayed.

Figure 36. The Group Edit Window



This window allows the user to:

- **Add** new Groups, set their Access Level and Connection Type. Set their Group Rights and the Sites they have access to.
- **Edit** existing records. Clicking in the Edit button adds a **Show Users** and **Add All Sites** Button on the Button Bar. The Show Users button displays all users in the currently selected group. The Add All Sites button will add all available Sites to the selected group.
- **Delete** existing records.
- **Search** through current records by Group Name, Access Level and Connection Type fields.

Access Levels

The Access Levels are priority ratings used by the unit to determine if a currently established connection should terminate when a user with a higher priority level requests a connection.

If the current user has a lower access level, the unit will break its connection after sending a message to the users PC indicating that their connection has been terminated.

The status bar at the bottom of the SymNav main window will also indicate that the **unit terminated the connection**.

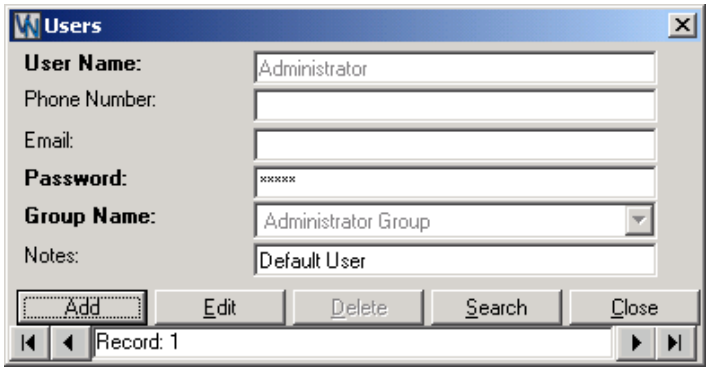
There are three levels of access that can be set up in SymNav:

- 1 (lowest)
- 2
- 3 (highest)

User Administration

User Administration provides all the data required for adding users and user information into various Groups. The users will have the rights and access levels of the group to which they are assigned.

Figure 37. The User Edit Window



To access User Administration, select **Setup Menu/Security/User Administration** from the menu bar. The Users Edit window will be displayed.

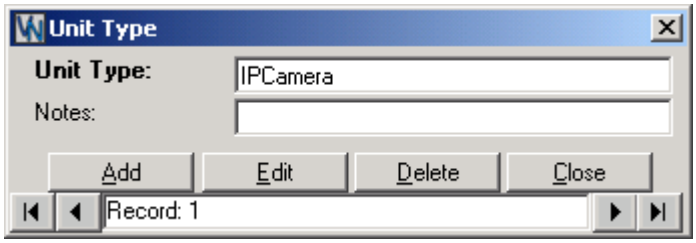
This window allows the user to:

- **Add** new users.
- **Edit** existing users.
- **Delete** existing users.
- **Search** through current records by User Name, Phone Number, Email Address, and Group Name.

Unit Type Setup

Unit Type Setup provides the data required for Unit Type field in the Site Administration window. To access Unit Type Setup, select **Setup Menu/Security/Unit Type Setup** from the menu bar. The Unit Type Edit window will be displayed.

Figure 38. The Unit Type Edit Window



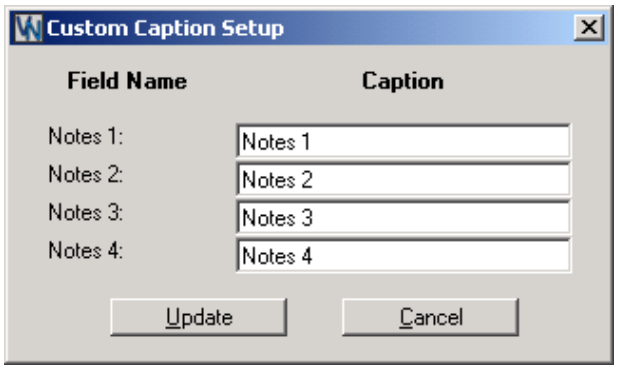
This window allows the user to:

- **Add** new devices.
- **Edit** existing devices.
- **Delete** existing devices.

Custom Caption Setup

The Custom Caption Setup menu allows the user to change the 4 provided Notes fields into user labelled fields. To access the Custom Caption Setup, select **Setup Menu/Security/Custom Caption Setup** from the menu bar. The Custom Caption Setup Edit window will be displayed.

Figure 39. The Custom Caption Setup Window



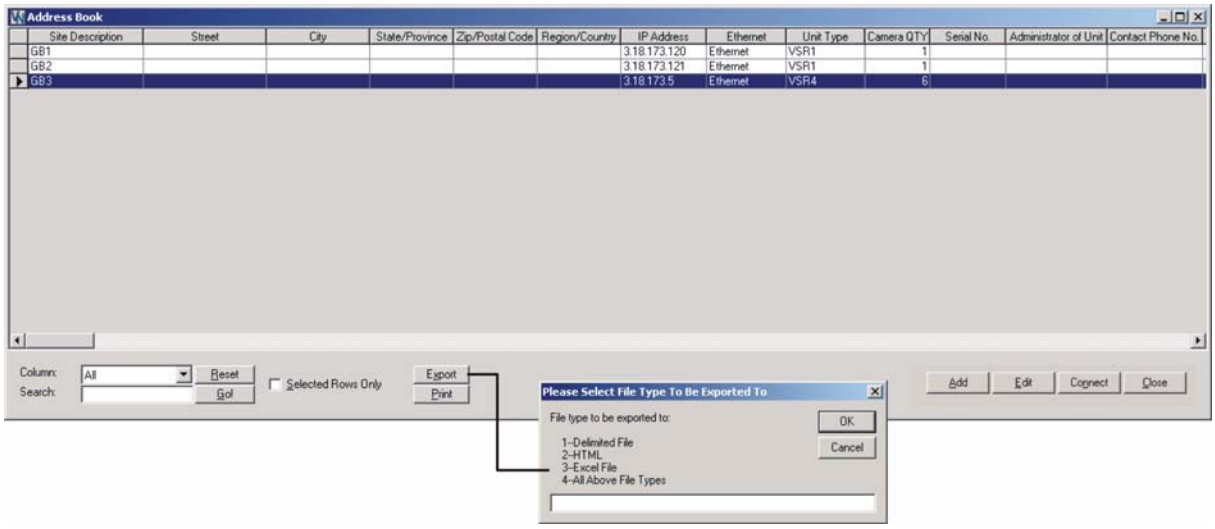
To relabel a field name simply highlight the current label, type in the new designation and click on the **Update** button.

The Address Book

The Address Book is a comprehensive relational database consisting of the following fields:

- Site Description
- Street Address
- City
- State/Province
- Zip/Postal Code
- Region/Country
- IP Address/Phone Number
- Ethernet (Connection type)
- Unit Type (DSR, SymDec, etc.)
- Camera Quantity
- Serial Number
- Administrator of Unit
- Contact Phone Number
- Notes (4 fields)

Figure 40. The Address Book



The lower portion of the Address Book contains groups of command buttons. Use the **Column/ Search** fields to perform searches by category and keyword.

Use the **Export** button to send the Address Book data into one of or all the following filetypes:

- A delimited file
- An HTML file
- An Excel file

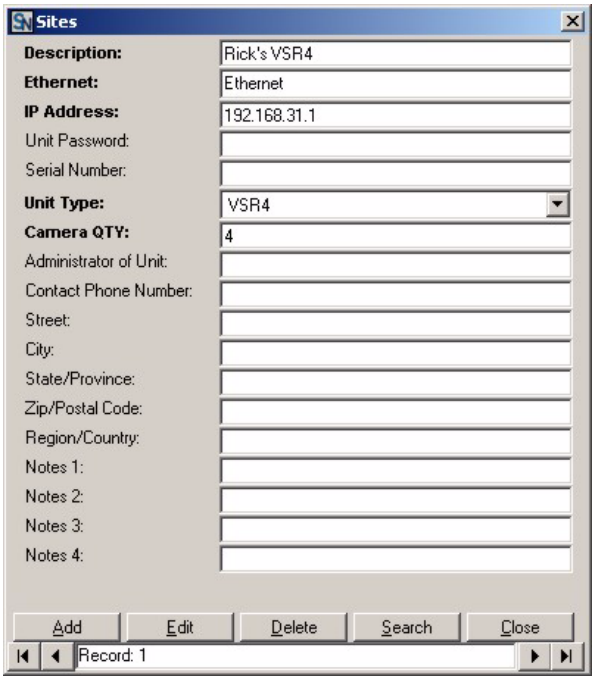
Use the **Print** button to send the Address Book data to the default printer in a spreadsheet-like format.

Connecting to a Site/Device via the Address Book

Highlight a selection on the Address Book and double-click, or click on the **Select** button. SymNav will attempt to connect to the device/site using the parameters specified in the database. See *Site Administration* on page 32 for information on creating and editing the Address Book. If SymNav cannot connect to the device/site it will display a time-out message. Verify that the parameters in the Address Book are correct. If the parameters are correct verify that the PC can connect to the Internet or to another ethernet connected device.

Editing the Address Book

Figure 41. The Site Edit Window

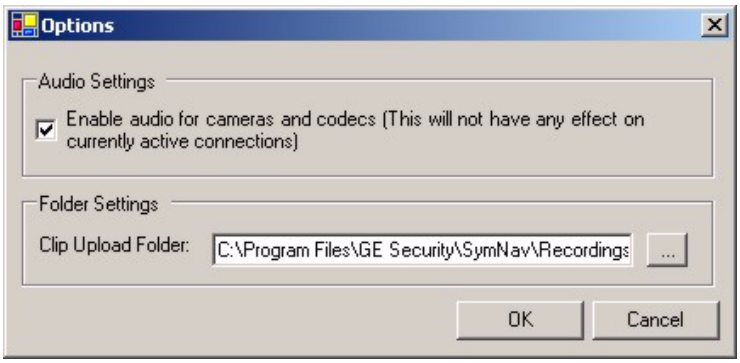


To edit the Address Book, click on the **Edit** button. The Site edit window will appear. Enter the sites information and click the **Update** button when done.

The Options Menu

The Options menu enables you to enable or disable audio recording from audio capable cameras and any connected SymNet units. You can also designated where on your hard drive to store your uploaded clips.

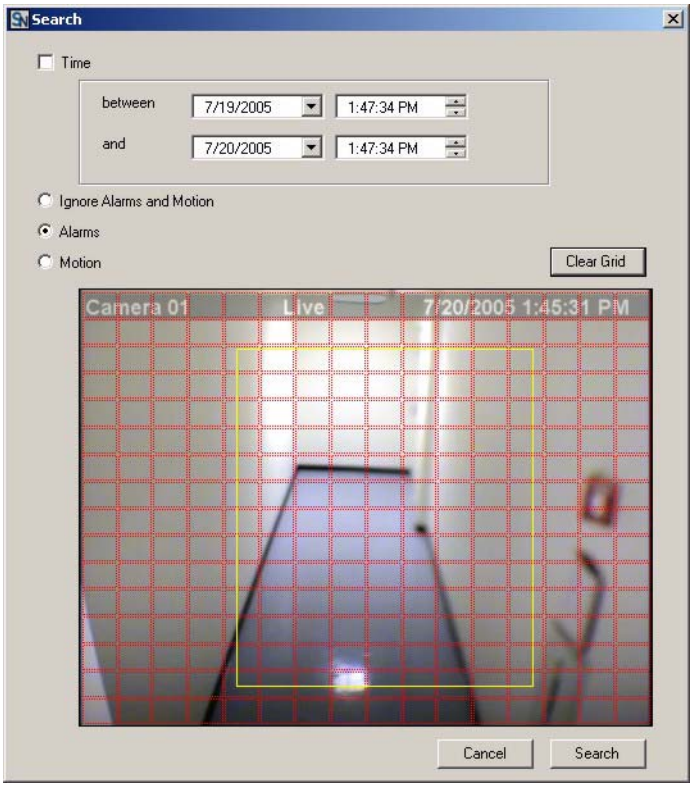
Figure 42. The Options menu



The Search Menu

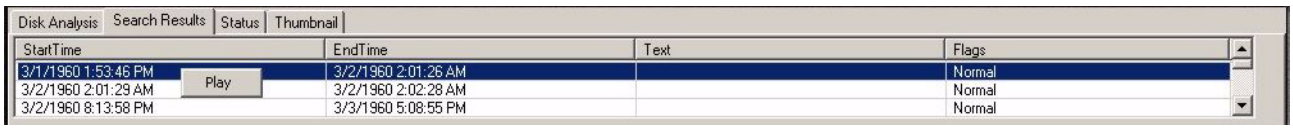
Click on the **Search** icon or the **Search** command on the File bar to launch the search dialog window.

Figure 43. The Search Menu



From this window you can search between selected date and times for video that occurred between these parameters by time and/or alarm. You can also perform a motion search. Click and drag your mouse over the grid to select specific areas of the screen The search results show up in the **Tab Control Window**.

Figure 44. The Search Results Tab



Double or right-click on any selection to play that selection.

The Help Menu

The Help menu provides the *About* command for quickly displaying the SymNav software version level.

Contacting technical support

For assistance installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided. If you still have questions, you may contact technical support and sales during normal business hours (Monday through Friday, excluding holidays, between 6 a.m. and 5 p.m. Pacific Time).

Table 2. Sales and support contact information

	Sales	Technical support
Phone:	800-469-1676	**888-437-3287**
E-mail	`cvovideosales@ge.com`	`generaltech@ge.com`
Fax	541-754-7162	**541-752-9096** (available 24 hours a day)

Note: Be ready at the equipment before calling for technical support.

Online publication library

Another great resource for assistance with your GE Security products is our online publication library, available to all of our customers on our website. To access our publication library, go to our website at the following location:

`http://www.gesecurity.com`

In the **Tools** area at the top, click the *Publication Library* link then select *Video Surveillance*. After you register and log on, you may search through our online library for the documentation you need.[1]

1. Many GE Security documents are provided as PDFs (portable document format). To read these documents, you will need Adobe Acrobat Reader, which can be downloaded free from Adobe's website at `www.adobe.com`.